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EXAMINER

THAKUR, VIREN A

ART UNIT	PAPER NUMBER
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1761

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/822,091	Applicant(s) ADDINGTON ET AL.	
	Examiner Viren Thakur	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/8/04</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Item 10 is not in Figure 1, as mentioned in paragraphs 0019, 0021, 0022, 0029. Item 45 is not in the figures, as mentioned in paragraph 0030.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 4 objected to because of the following informalities: The claim is dependent on claim 2, however the nozzles to which claim 4 refers provides proper antecedent basis to claim 3 and not claim 2. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 6-10, 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Willard et al. (US 4889733). As recited in instant claims 1, 9 and 18, Willard et al. disclose a method of making a snack food product, comprising: mixing ingredients to provide an agglomerated mixture (Figure 2, Item 112 and 113). It is known that mixing ingredients to form dough results in an agglomerated mixture. Willard et al. further disclose rolling the agglomerated mixture into a dual-sheeted dough (Figure 2, Item 119, 120, 124); cutting character-shaped forms from the dual-sheeted dough (Column 5, Lines 62-64; Column 6, Lines 5-

7; Column 16, Lines 20-23). By cutting the dough into any shape, it is interpreted that Willard et al. disclose cutting into character-shaped forms. Willard et al. further disclose transporting the character-shaped forms into a fryer for cooking (Figure 2, Item 150; Column 17, Lines 63-64). Regarding rotating the character-shaped forms while in the fryer, Willard et al. disclose wherein the snacks are free floating on the surface of the fryer (Column 17, Lines 65-67), thus it is inherent that said snack will rotate to *any* degree in a direction when free floating. By frying the escaping moisture within the dough creates steam bubbles that would have intrinsically caused the snack to rotate. Additionally, rotation of a free floating product would also have occurred as a result of the movement of the oil within the fryer that conveys the fried snack to the next processing step: even minimal turbulence created in the oil (Column 6, Lines 22-26) would have caused some rotation in the dough product. Furthermore, as can be seen in Figure 1 and Figure 2, the dough product is free floating with one side submerged and subsequently dispersed and completely immersed in the fryer, for the purpose of completing the frying (Column 6, Lines 54-63). In being dispersed uniformly by a paddle and being completely immersed it is known that the dough product would have rotated to some degree. As recited in instant claims 2, 10 and 19, Willard et al. disclose wherein the snack food forms floating on the surface of the cooking oil have a first surface submerged in the cooking oil and a second surface above the surface of the cooking oil (Column 6, Lines 8-13). As recited in instant claim 14, Willard et al. disclose wherein the dark dough and the light

dough are intermixed (Column 18, Lines 55-60), thus both a first and a second sheet of dough are formed from the same agglomerated mixture. As recited in instant claims 6-7 and 15-16, Willard et al. disclose the step of producing web scrap to mix with the agglomerated mixture prior to the step of rolling the agglomerated mixture into a dual-sheeted dough (Figure 2, Item 146; Column 17, Lines 35-40). As recited in instant claims 8 and 17, Willard et al. disclose wherein the step of transporting the character-shaped forms into a fryer includes the step of placing the character-shaped forms on a conveyor belt (Figure 2, Item 150), which terminates above the fryer (Figure 2, Item 160) so that the character-shaped forms fall into the fryer. Regarding instant claim 18, Willard et al. disclose an apparatus to perform the method steps as recited in the instant claims (Figure 6). The Examiner notes that instant claim 18 recites terminology that invokes 112, 6th paragraph, means-plus function language; however, the disclosure does not provided adequate support for what are the applicable functions. Based on the guidelines set forth in MPEP Section 2181 the Examiner has applied the means plus function based on that which would have been known to one having ordinary skill in the art to perform said function.

5. Claims 9-13, 15-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Fink et al. (US 6291001). As recited in instant claims 9 and 18, Fink et al. disclose a method of making a snack food product, comprising: mixing ingredients to provide an agglomerated mixture (Column 4, Lines 7-12), forming

a sheeted dough from the agglomerated mixture (Column 4, Lines 7-16), cutting snack food forms from the sheeted dough (Column 4, Lines 16-27), transporting (Figure 1, Item 18) the snack food forms (Figure 1, Item 146) into a fryer (Figure 1, Item 148) and rotating the snack food forms while in the fryer to cook multiple sides of the snack food form (Figure 1, Item 156 and 158). Fink et al. also disclose a first frying bath (Figure 7, Hot Oil Pool) through which said snack food is conveyed. As can be seen in Figure 4A, the snack food on the preform is ramped down upon entrance into the partial frying section, and subsequently ramped up when exiting the partial frying section. On entrance and exit, the Examiner interprets that the snack food is rotated in a direction upon entrance and exit from the partial frying section. Regarding instant claim 18, Fink et al. disclose an apparatus to perform the method steps as recited in the instant claims (Figure 1). The Examiner notes that instant claim 18 recites terminology that invokes 112, 6th paragraph, means-plus function language; however, the disclosure does not provided adequate support for what are the applicable functions. Based on the guidelines set forth in MPEP Section 2181 the Examiner has applied the means plus function based on that which would have been known to one having ordinary skill in the art to perform said function. As recited in instant claims 10 and 19, Fink et al. disclose providing a fryer bath (Figure 7, See Hot Oil Pool) containing cooking oil for cooking the snack food forms, wherein the snack food forms floating on the surface of the cooking oil have a first surface submerged in the cooking oil and a second surface above the

surface of the cooking oil (Figure 7). As can be seen in Figure 7, the preforms that the food product is placed on are perforated and submerged into the hot oil pool (Column 2, Lines 56-61). Thus, the side of the food product contacting the preform is submerged, while the opposite side, facing the nozzles (Figure 7, Item 114) is above the surface of the cooking oil. In addition, Fink et al. disclose wherein the partially fried food products (Figure 1, Item 146) are conveyed by a conveyor into a fryer (Figure 1, Item 148). Fink et al. further disclose submergers (Figure 1, Item 152 and 154) that submerge the chips. After dropping into the fryer the chip would initially be immersed in the oil and subsequently float to the top due to the steam bubbles and evaporation of the water within the chip. As a result one side of the chip would be submerged in the oil while the other side would be above the surface of the oil (Column 2, Lines 10-16, 37-41; Column 3, Lines 7-18). As recited in instant claims 11 and 20, Fink et al. disclose nozzles (Figure 7, Item 114) above the fryer bath (Figure 7, Hot Oil Pool) and pointed in the direction of the fryer bath. Regarding instant claims 12 and 21, Fink et al. disclose injecting streams of cooking oil (Figure 7, Hot Oil) from the nozzles (Figure 7, Item 114) into the fryer (Figure 7, Hot Oil Pool). This is based on one interpretation by the Examiner that to flip the snack food forms floating on the surface of the cooking oil so that the second surface becomes submerged in the cooking oil *is the intended use of* injecting streams of cooking oil from the nozzles. Thus, since Fink et al. have met the method step and structure of a nozzle that injects streams of cooking oil, said step and structure are capable of

the intended use, which is to flip the food product. As recited in instant claims 13 and 22, Fink et al. disclose pumping cooking oil (Figure 4A, Item 116) from the fryer bath (Figure 4A, Near Item 102) through a conduit (Figure 4A, Item 118) to the nozzles (Figure 4A, Item 114; See Also Column 6, Lines 13-24). As recited in instant claims 15 and 16, Fink et al. disclose returning the web scrap to mix with the agglomerated mixture prior to the step of forming the sheeted dough (Column 4, Lines 42-45). As recited in instant claim 17, Fink et al. disclose transporting the snack food items from a fryer by placing the snack food forms on a conveyor belt (Figure 1, Item 18), which terminates above the fryer (Figure 1, Item 148) so that the snack food forms fall into the fryer.

6. Claims 9 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Irvin et al. (US 4985269). As recited in instant claims 9 and 18, Irvin et al. disclose a method and manufacturing system of making a snack food product, comprising: mixing ingredients to provide an agglomerated mixture (Figure 1, Metered Corn Feed In; Lime-Water In, Twin Screw Extruder), forming a sheeted dough from the agglomerated mixture (Figure 1, Masa Sheet); cutting snack food forms from the sheeted dough (Figure 1, Sheeting & Stamping); transporting the snack food forms into a fryer (Figure 1, Open Flame Gas Oven to Fryer); rotating the snack food forms while in the fryer to cook multiple sides of the snack food form (Figure 1, See rotating means within the fryer). The Examiner notes that instant claim 18 recites terminology that invokes 112, 6th paragraph, means-plus

function language; however, the disclosure as not provided adequate support for what are the applicable functions. Based on the guidelines set forth in MPEP Section 2181 the Examiner has applied the means plus function based on functions that would have been known to one having ordinary skill in the art.

7. Claims 9, 15-16 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Izzi (US 4285979). As recited in instant claims 9 and 18, Izzi disclose a method and manufacturing system (Figures 8 and 9) of making a snack food product, comprising: mixing ingredients to provide an agglomerated mixture (Figure 8, Item 20, 22; Figure 7, Item 6); forming a sheeted dough from the agglomerated mixture (Figure 8, Item 30); cutting snack food forms from the sheeted dough (Figure 8, Item 40); transporting the snack food forms into a fryer (Figure 9, Item 51) and rotating the snack food forms while in the fryer to cook multiple sides of the snack food form (Figure 9, Item 55). As recited in instant claims 15 and 16, Izzi discloses returning the web scrap to mix with the agglomerated mixture prior to the step of forming the sheeted dough (Figure 7, See SCRAP). Additionally regarding instant claim 18, Izzi discloses a means for rotating (Figure 9, Item 55) so that both sides of the dough product are fried. The Examiner notes that instant claim 18 recites terminology that invokes 112, 6th paragraph, means-plus function language; however, the disclosure as not provided adequate support for what are the applicable functions. Based on the guidelines set forth in MPEP Section 2181 the Examiner has applied the means

plus function based on functions that would have been known to one having ordinary skill in the art.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 3-5, 11-13 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willard et al. (US 4889733) in view of Nockermann et al. (US 6689408). Willard et al. disclose as cited above. Willard et al. further disclose wherein the dough product is initially fried in a shallow section of the fryer such that the dough product would not overturn. The purpose of this was to ensure

that the curvature of the fried dough product was attained. After the appropriate shape had been achieved, the partially fried dough product is then submerged in a deeper section of the fryer so as to complete the frying (Column 13, Line 50 to Column 14, Line 42). Additionally, Willard et al. teach that the food product should not be overturned *until* the shape of the fried dough product is attained. After such a point the dough product submerged so as to complete the frying of both sides of the product.

Willard et al. are silent in teaching providing nozzles positioned above the fryer bath and pointed in the direction of the fryer bath; wherein the step of rotating the character-shaped forms further includes the step of injecting streams of cooking oil from the nozzles into the fryer bath to flip the character-shaped forms floating on the surface of the cooking oil so that the second surface becomes submerged in the cooking oil; wherein the step of rotating the character-shaped forms further includes the step of pumping cooking oil from the fryer bath through a conduit to the nozzles.

Nockermann et al. disclose a method and apparatus for deep-frying products using a deep frying bath (Figure 10, Item 4) wherein the product to be deep fried sits within the cooking oil bath. The cooking oil bath includes a filtering section (Figure 10, Item 37), pump (Figure 10, Item 9), feed pipe (Figure 10, Item 10) and a distribution pipe (Figure 10, Item 43), so that the hood deep-frying fat is also poured over the food product. Nockermann et al. further teach

wherein the velocity of the fat that runs through the system is at a maximum (Column 14, Lines 9-15).

Similar to Willard et al., Nockermann et al. disclose frying and additionally, deep frying food products, such as chips (Column 3, Line 42). By circulating the hot frying fat, Nockermann et al. teach minimizing the amount of fat used for deep frying and minimizing the heating up times for the fat and preventing damage to the load of the fat (Column 3, Lines 17-35). Additionally, Nockermann et al. teach improved uniformity in the fat quality while using a smaller amount of fat (Column 3, Lines 36-55). By shortening the deep frying times, the heat is directed to the surface of the food product by fat that is flowing with high intensity, thus avoiding the partial overheating on the heating surfaces of the food product (Column 3, Line 57 to Column 4, Line 2). As taught above, Willard et al. seek to control the frying process so as to form a specific shape to the dough product and then subsequently submerge the dough product so as to complete the frying. Given the teachings of Nockermann et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Willard et al. to circulate the hot oil in the deep frying section by pouring the oil from above, as taught by Nockermann et al. for the purpose of minimizing the amount of cooking oil used and further controlling the heat applied to the food product. Such a modification would prevent the overheating of the food surface of Willard et al.'s dough product, when completing the frying. In addition, since Nockermann et al. teach applying the hot cooking fat at a maximum velocity

through the overhead pipe (Figure 10, Item 43), it would have been obvious that the velocity of the cooking oil in relation to the size, shape and weight of a chip would have caused the chip to flip. Additionally, as taught by Willard et al., the natural tendency of the dough piece is to turn over, depending on the depth of the oil and the size of the dough piece (Column 13, Lines 64-68). Therefore, modification of Willard et al. as taught by Nockermann et al., would result in completed frying during the immersing section of the frying by submerging and rotating the dough pieces.

11. Claims 3-5, 11-13 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willard et al. (US 4889733) in view of Hattori et al. (US 5182982). Willard et al. disclose as cited above.

Willard et al. are silent in teaching providing nozzles positioned above the fryer bath and pointed in the direction of the fryer bath; wherein the step of rotating the character-shaped forms further includes the step of injecting streams of cooking oil from the nozzles into the fryer bath to flip the character-shaped forms floating on the surface of the cooking oil so that the second surface becomes submerged in the cooking oil; wherein the step of rotating the character-shaped forms further includes the step of pumping cooking oil from the fryer bath through a conduit to the nozzles.

Hattori et al. disclose submerging a product to be fried in frying oil (Column 5, Lines 15-21) and subsequently spraying said product with oil from

above (Figure 1, Items 102 and 104). The spray results from circulating the oil from the bath using a discharge pipe (Figure 1, Item 98) and subsequently pumping (Figure 1, Item 90) through pipes (Figure 1, Items 102 and 104). By spraying the submerged product from overhead, Hattori et al. teach preventing the material from being deposited on the net conveyor and further agitates the frying oil so as to prevent any irregularity in the frying (Column 6, Line 58 to Column 7, Line 2). Thus, one having ordinary skill in the art would have recognized that the floating product would be rotated and overturned (or agitated) as a result of the overhead sprays in order to prevent depositing of said product onto the net conveyor. Additionally, agitation of the frying oil as a result of the sprays would also have caused the floating product to have been agitated or flipped.

Thus both Hattori et al. and Willard et al. seek to control the heat of the frying so as to evenly fry the food product disposed therein. Given these teachings, it would have been obvious to one having ordinary skill in the art to modify Willard et al. to circulate the frying oil and spray from overhead, as taught by Hattori et al., for the purpose of agitation of the frying oil. Such a modification would have prevented irregularities in the frying oil, thus preventing over cooking of portions of the fried product. Additionally, as discussed above, as a result of the agitation of the frying oil, it would have been obvious that spraying food product that are floating in a bath of cooking oil would have also agitated and thus flipped or rotated the floating food product.

12. Claims 1-8 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Fink et al. (US 6291001) in view of Willard et al. (US 4889733). Regarding instant claims 1-8, Fink et al. disclose as cited above. Regarding instant claims 3 and 4, the Examiner has used the same interpretation of the claim limitation as that used for claims 12 and 21 in the 102 rejection above. The Examiner interprets that to flip the snack food forms floating on the surface of the cooking oil so that the second surface becomes submerged in the cooking oil *is the intended use of* injecting streams of cooking oil from the nozzles. Thus since Fink et al. have met the method step and structure of a nozzle that injects streams of cooking oil, said step and structure are capable of the intended use. Fink et al. further teach using performs to create a curved shape chip (Column 1, Lines 41-50).

Fink et al. are silent in teaching wherein the agglomerated mixture is rolled into dual sheeted dough.

Willard et al. disclose as cited above. Willard et al. further teach using two dough layers for the purpose of creating snacks with distinct shapes and flavors (Column 16, Lines 38-42). Similar to Fink et al. Willard et al. teach forming a curved chip by controlling the frying of the dough product and then placing the dough product into a secondary frying step. Additionally, as evidenced by Willard et al. (US 4889733) and further supported by Jean (2615809) and T.L Green Biscuit & Cracker, forming a dough product using two sheets of dough has been

well established in the art for making any type of fried dough based product, such as crackers, chips and other alimentary compositions. Depending on how the two sheets of dough are rolled, Willard et al. teach that the different types of dough can be intermixed so that both sheets are rolled from the same mixture (Column 18, Lines 55-60). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a dual sheet dough for the purpose changing the desired look, texture of the fried product.

Regarding instant claim 2, Fink et al. disclose wherein the partially fried food products (Figure 1, Item 146) are conveyed by a conveyor into a fryer (Figure 1, Item 148). Fink et al. further disclose submergers (Figure 1, Item 152 and 154) that submerge and flip the chips. After dropping into the fryer the chip would initially be immersed in the oil and subsequently float to the top due to the steam bubbles and evaporation of the water within the chip. As a result one side of the chip would be submerged in the oil while the other side would be above the surface of the oil (Column 2, Lines 10-16, 37-41; Column 3, Lines 7-18).

13. Claims 11-13 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fink et al. (US 6291001) in view of Hattori et al. (US 5182982). Fink et al. disclose as cited above in paragraph 5. Fink et al. further teach a chip orientation device (Figure 11, Item 156) that ensures that the chip is removed from the oil with the concave side down, so as to prevent the build up of

excess oil (Column 8, Lines 23-29). This is accomplished by oscillating the device several times (Column 8, Lines 30-48).

The Examiner has used an alternative interpretation in this 35 U.S.C. 103 rejection, as discussed below, which is different from interpretation of instant claims 12 and 21 applied under 35 U.S.C. 102. Based on an interpretation that the flipping of the character-shaped forms *is not* an intended use of the streams of cooking oil from the nozzles, Fink et al. are silent in teaching providing nozzles positioned above the fryer bath and pointed in the direction of the fryer bath; wherein the step of rotating the character-shaped forms further includes the step of injecting streams of cooking oil from the nozzles into the fryer bath to flip the character-shaped forms floating on the surface of the cooking oil so that the second surface becomes submerged in the cooking oil; wherein the step of rotating the character-shaped forms further includes the step of pumping cooking oil from the fryer bath through a conduit to the nozzles.

Hattori et al. disclose submerging a product to be fried in frying oil (Column 5, Lines 15-21) and subsequently spraying said product with oil from above (Figure 1, Items 102 and 104). The spray results from circulating the oil from the bath using a discharge pipe (Figure 1, Item 98) and subsequently pumping (Figure 1, Item 90) through pipes (Figure 1, Items 102 and 104). By spraying the submerged product from overhead, Hattori et al. teach preventing the material from being deposited on the net conveyor and further agitates the frying oil so as to prevent any irregularity in the frying (Column 6, Line 58 to

Column 7, Line 2). Thus, one having ordinary skill in the art would have recognized that the floating product would be rotated and overturned (or agitated) as a result of the overhead sprays in order to prevent depositing of said product onto the net conveyor. Additionally, agitation of the frying oil as a result of the sprays would also have caused the floating product to have been agitated or flipped.

Thus, Fink et al. disclose the need to submerge the chips, since the hydrodynamic forces of the chip cause it to rise to the surface of the oil. And further disclose the need to turn the chip so that the concave side is down. Similarly, Hattori et al. use spray jets to agitate the oil and subsequently agitate the fried product so as to more evenly cook the food product by even distribution of the heat within the oil bath. Given these teachings, it would have been obvious to one having ordinary skill in the art to modify Fink et al. to use an overhead spray of the hot oil as taught by Hattori et al. for the purpose of completing the frying of the food product without overheating during submersion. Additionally, given Hattori et al.'s teachings, such a modification could have ensured that the chips were facing the correct direction upon exiting the secondary fryer (concave side down), so as to prevent the collection of excess oil within the chip.

14. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fink et al. (US 6291001) in view of Willard et al. (US 4889733), as applied to

claims 1-8 and 14, above, and in further view of Hattori et al. (US 5182982). The Examiner has used an alternative interpretation in this 35 U.S.C. 103 rejection, as discussed below, which is different from interpretation applied in the 103 rejection of claims 1-8, in paragraph 12. Based on an interpretation that the flipping of the character-shaped forms *is not* an intended use of the streams of cooking oil from the nozzles, Fink et al. are silent in teaching providing nozzles positioned above the fryer bath and pointed in the direction of the fryer bath; wherein the step of rotating the character-shaped forms further includes the step of injecting streams of cooking oil from the nozzles into the fryer bath to flip the character-shaped forms floating on the surface of the cooking oil so that the second surface becomes submerged in the cooking oil; wherein the step of rotating the character-shaped forms further includes the step of pumping cooking oil from the fryer bath through a conduit to the nozzles. However, instant claims 3 and 4 are rejected over Fink et al. in view of Willard et al. and in further view of Hattori et al., for the reasons stated above in (paragraph 13), as applied to claims 11-13 and 20-22.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 1927786 discloses a method and apparatus for cooking doughnuts that uses a circulating overhead spray to spray the doughnut

with the heated cooking medium so as to evenly cook both sides. Additional rotating means are disclosed for flipping the food product onto the non-submerged side. US 6455085 and US 5066505 disclose means for frying a food product using a circulating overhead spray of the hot cooking oil. US 4357862 discloses frying a dough product, by mixing ingredients, forming a sheet, cutting said sheet and frying said cut dough product. WO8806849, US 2615809, and T.L Green Biscuit & Cracker discloses forming a product using two sheets of starch that are laminated together. US 3576647, US 3608474, US 3626466, US 6412399 discloses a method and apparatus for continuously preparing fried products from a sheet of dough including an infeed conveyor to carry a sheet of dough; a cutter for cutting pieces of dough and subsequently shaping the dough and frying the dough. US 3694228 discloses frying a cake wherein the cake is fried on one side and subsequently turned over to fry the other side. US 4082033, US 4176590 discloses an automatic dough making process wherein the dough is mixed, formed and dropped into a fryer. The fried dough is subsequently flipped over during frying to cook both sides. US 4844930, US 5085137 discloses a method of cutting, frying and flipping a potato chip. US 5112633 discloses teaches a nozzle that uses air in order to turn and flip the fried food product. US 5615606, US 5666876 discloses teaches spraying from above and below the food product. US 5839355, US 5942269 discloses computer management for a dough frying process and apparatus. US 6129939, US 6467398, US 20020108501 discloses mixing, cutting and frying dough wherein

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the dough is sprayed from above using the frying oil and is subsequently immersed in cooking oil to complete the frying. US 6746702 discloses mixing, sheeting, cutting and frying dough. US 4923705 discloses frying of potato chips using flippers to turn over the chip during frying.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viren Thakur whose telephone number is (571)-272-6694. The examiner can normally be reached on Monday through Friday from 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571)272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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